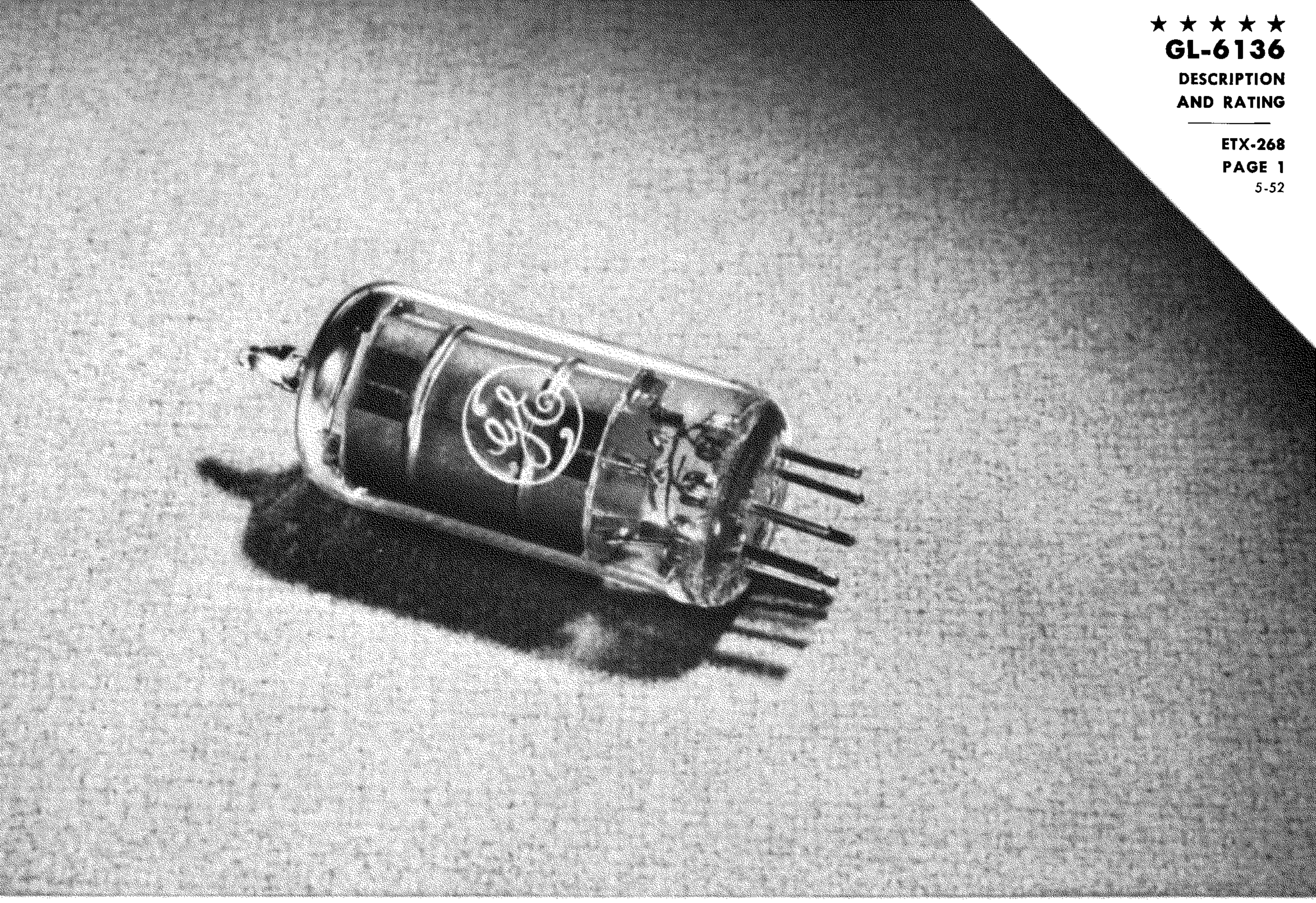


PENTODE

DESCRIPTION

The GL-6136 is a miniature sharp cutoff pentode for use as a high-gain radio-frequency or intermediate-frequency amplifier. The tube is specially designed to assure dependable life and reliable service under the exacting conditions encountered in mobile and aircraft applications. Features include a high degree of mechanical strength and a heater-cathode construction designed to withstand many-thousand cycles of intermittent operation.

TECHNICAL INFORMATION

GENERAL

Electrical Data

Cathode—Coated Unipotential

Heater Voltage (A-c or D-c)	6.3		Volts
Heater Current	0.3		Ampere
Direct Interelectrode Capacitances	With Shield*	Without Shield	
Grid—No. 1 to Plate, maximum	0.0035	0.0035	uuf
Input	6.5	6.0	uuf
Output	5.5	5.0	uuf

Mechanical Data

Mounting Position—Any
Envelope—T-5½ Glass
Base—Miniature Button 7-Pin, E7-1

Electronic TUBE

GENERAL ELECTRIC

TECHNICAL INFORMATION (CONT'D)

MAXIMUM RATINGS

Electrical—Design Center Values		
Plate Voltage	300	Volts
Suppressor Voltage†	0	Volt
Screen Supply Voltage	300	Volts
Screen Voltage	150	Volts
Positive D-c Grid—No. 1 Voltage	0	Volt
Plate Dissipation	3.0	Watts
Screen Dissipation	0.65	Watt
Heater-Cathode Voltage	90	Volts
Mechanical		
Peak Impact Acceleration in Any Direction	600	G

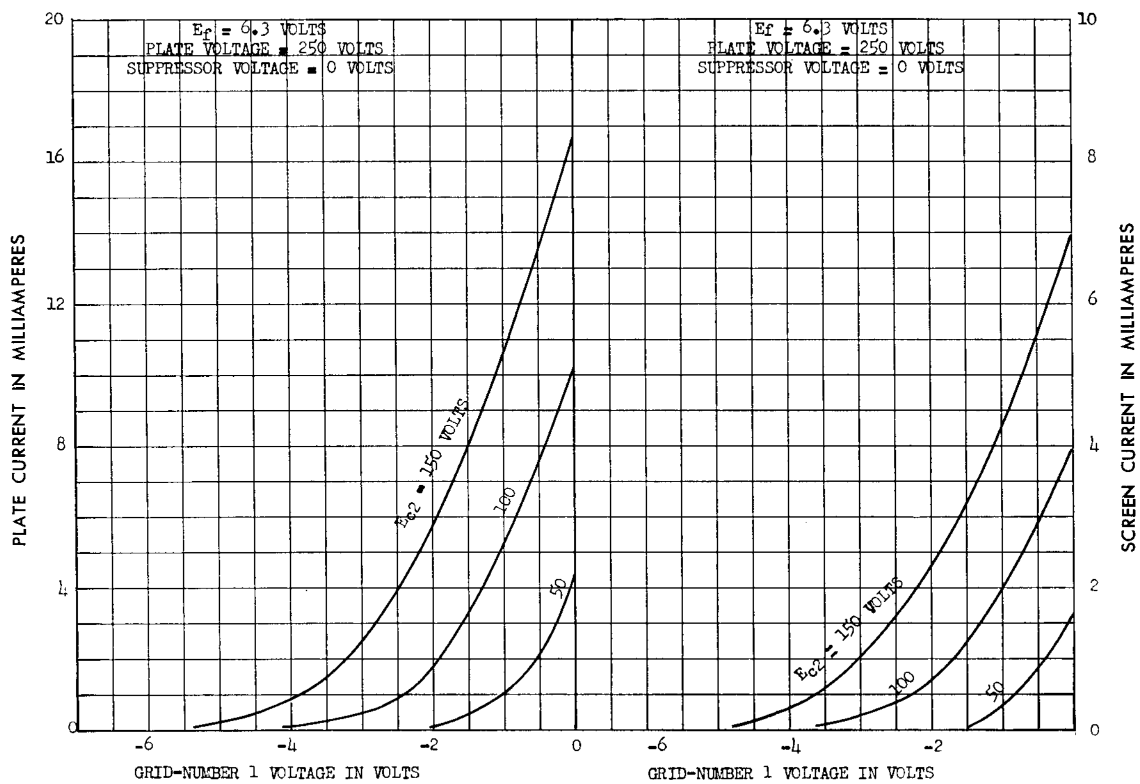
CHARACTERISTICS AND TYPICAL OPERATION

Class A_1 Amplifier			
Plate Voltage	100	250	Volts
Suppressor Voltage†	0	0	Volt
Screen Voltage	100	150	Volts
Cathode Bias Resistor	150	68	Ohms
Plate Resistance, approximate	0.5	1.0	Megohm
Transconductance	3900	5200	Micromhos
Plate Current	5.0	10.6	Milliamperes
Screen Current	2.1	4.3	Milliamperes
Grid—No. 1 Voltage, approximate for I_b = 10 Microamperes	−4.2	−6.5	Volts

* With external shield No. 316 connected to pin 7.

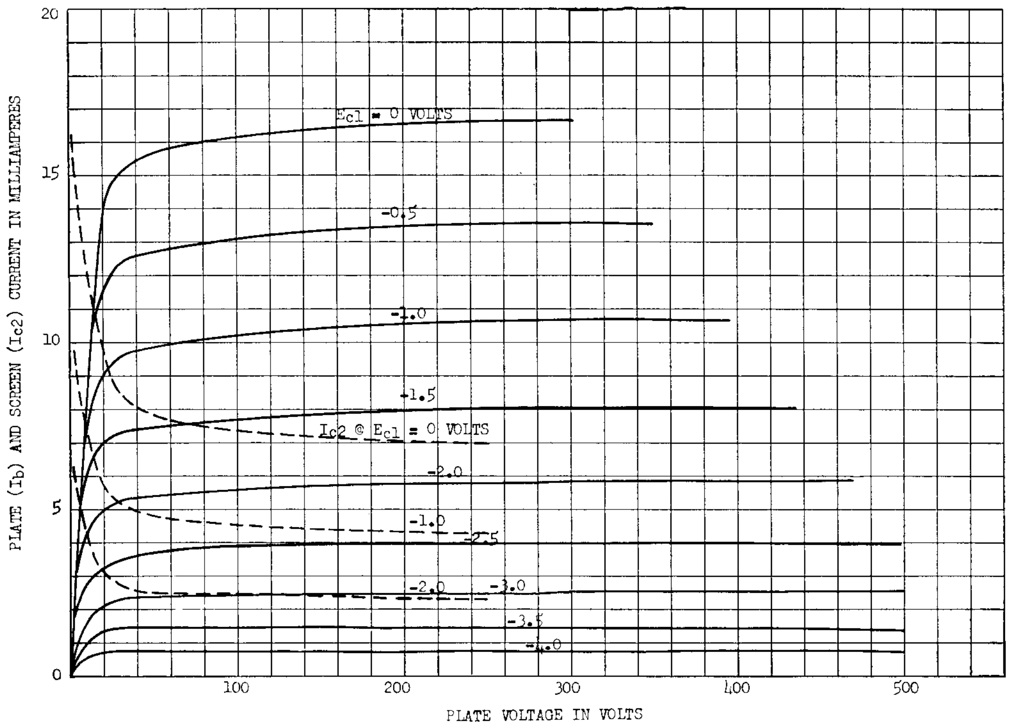
† Pin 2 connected to pin 7 at socket.

GL-6136
AVERAGE CHARACTERISTICS



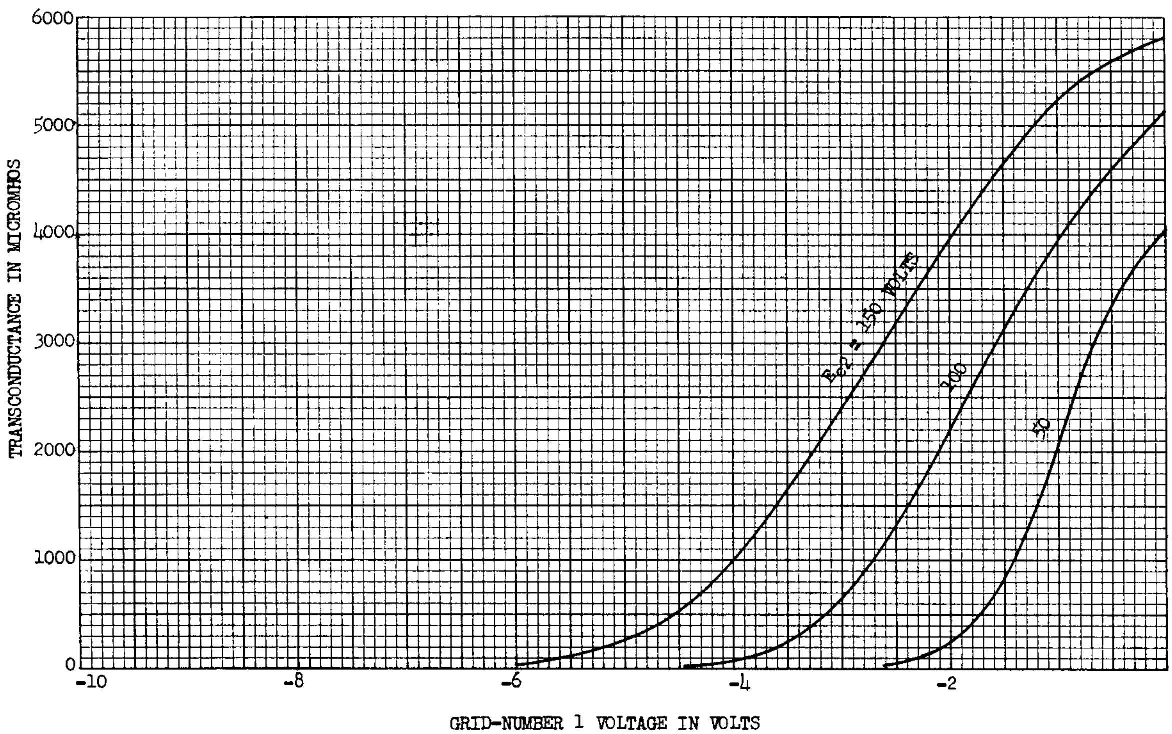
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AVERAGE PLATE CHARACTERISTICS
$E_f = 6.3$ VOLTS
SCREEN VOLTAGE = 150 VOLTS
SUPPRESSOR VOLTAGE = 0 VOLTS



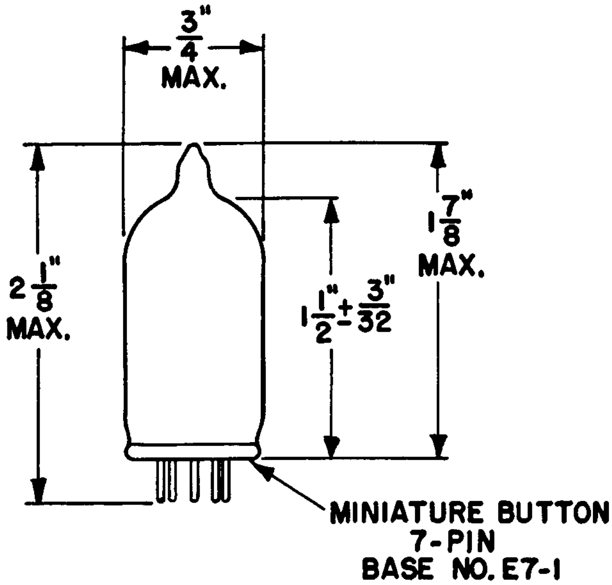
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AVERAGE CHARACTERISTICS
$E_f = 6.3$ VOLTS
PLATE VOLTAGE = 250 VOLTS
SUPPRESSOR VOLTAGE = 0 VOLTS

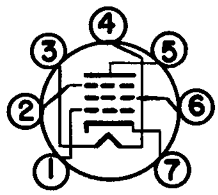


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OUTLINE
GL-6136



BASING DIAGRAM



7BK

PIN 1: GRID NO. 1
PIN 2: GRID NO. 3 AND INTERNAL SHIELD
PIN 3: HEATER
PIN 4: HEATER
PIN 5: PLATE
PIN 6: GRID NO. 2 (SCREEN)
PIN 7: CATHODE

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